National Marine Sanctuaries
National Oceanic & Atmospheric Administration

THUNDER BAY NATIONAL MARINE SANCTUARY

Working with ROVs - Tools for Exploring Your Environment

Thunder Bay National Marine Sanctuary & Northeast Michigan Great Lakes Stewardship Initiative Present: Working with Underwater Robots (Remotely Operated Vehicles - "ROVs")

Engaging Students in Community based Learning Using ROV Technology
March 12, 2011 (from 9 am to 4 pm on Saturday) at the Great Lakes Maritime Heritage Center and Alpena County Plaza Pool in Alpena, MI

Professional Development Opportunity

Workshop presenter Dr. Mark Gleason is the chief marine scientist and director of education at the Great Lakes Naval Memorial and Museum. Dr. Gleason has presented ROV workshops and trainings throughout the Great Lakes region. He has worked internationally as a professional ROV pilot and maritime educator.

Workshop Overview

Who Should Attend: Educators with an interest in new ways to engage students in local environmental projects such as watershed exploration and monitoring, invasive species study, maritime history/archaeology. Also applicable for teachers interested in hands-on science, technology, engineering and mathematics (STEM) disciplines. This workshop is open to both teachers and informal educators.

Details: This is a **FREE** workshop. Participants will be provided with lunch and a take home materials, including an ROV building project workbook. Travel stipend also available. Participants will be eligible for additional project funding for ROV projects. For teachers .6 SBCEU's available (pending).

Agenda

- Participants will learn how ROVs are used for scientific activities, including ROVs in the Great Lakes.
- Participants will learn how students can use ROVs to explore their local watershed
- Participants will design and build an ROV using a kit that can be replicated in the classroom or in an after school setting
- Participants will "fly" their ROVs in an underwater challenge course, they will also make design modifications based on the water challenges
- Participants will have an opportunity to "fly" a professional ROV and discuss the challenges of an underwater environment, such as buoyancy, weight, and propulsion
- Participants will learn how to use ROVs to support academic offerings such as environmental science and social studies

Sign Up Today!

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